

**The Relationship between Students' Language Abilities and Their Educational  
Backgrounds**

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# **THE RELATIONSHIP BETWEEN STUDENTS' LANGUAGE ABILITIES AND THEIR EDUCATIONAL BACKGROUNDS**

## **ABSTRACT**

This study, sponsored by Thailand Research Fund, examines the correlations between the students' language abilities and their educational backgrounds. About nine hundred ninth grade students in six public high schools across the country participated in this study. The language abilities measured were word analogy, grammar sensitivity, reading comprehension, and new word invention. Their educational backgrounds comprise of grade point average, age when began studying English, and years of English education were collected. Pearson product moment was used to investigate the correlations between the language abilities and the educational backgrounds. The major finding shows that new word invention is highly and significantly correlated with grade point average. It seems that good students understand the concept of "word" and enjoy playing with words. The significant implication of this study is dealing with the selection of the students to the English program.

## **INTRODUCTION**

Since 2002 in Thailand, 12 years of free basic education has been made available to students throughout the country for the first time which covers 6 years of primary, 3 years of lower secondary, and 3 years of upper secondary education. In addition, the 9 years of primary and lower secondary levels are compulsory. Office of the Education Council (2006) showed that in 2005-2006 there were 5.8 million primary students and 2.6 million lower secondary students. Thus, put differently, by combining these two levels of education, there were 8.4 million students in compulsory education.

Interestingly enough, the statistics indicates that 3-5% of the population is gifted (e.g., Colangelo & Davis, 2003; Gallagher & Gallagher, 1994; Marland, 1972; Samuel & Gallagher, 1986). Based on this statistics, in the year 2005-2006 there should be 250,000 – 400,000 students in compulsory education who are gifted in some ways, for instance, mathematics, sciences, sports, music, or languages. This number is significant. Following the 1999 National Education Act, special education for gifted and talented students has been offered. Office of the Education Council (2006, 36) clearly states that "suitable curricula, appropriate means to accelerate growth and development, a dynamic and vibrant environment, and well-trained mentors are approaches being implemented to nurture gifted children with talented for science and mathematics, language, sports, music, computing, visual and performing arts, and many other fields."

Special education for gifted and talented students is essential, yet it is relatively new to Thai contexts, especially for lower secondary students. The gifted programs in

languages have just been piloted. Thus, it is an urgent need to conduct research studies to better understand almost all aspects of Thai gifted students.

This study explores the relationship between the students' language ability and their educational backgrounds. It will shed some light on how to indicate potential students to participate in the gifted programs in languages efficiently and effectively.

## **OPERATIONAL DEFINITIONS**

Gifted students are those who have the test scores of  $X+2SD$  or are at the 97<sup>th</sup> percentile rank.

Language ability refers to the scores from five tasks, that is, (1) listening ability, (2) word analogy, (3) grammar, (4) reading comprehension, and (5) new word invention.

Educational backgrounds include gender, years of English study, and grade point average (GPA)

## **METHODOLOGY**

### **I. Sample**

A stratified random sampling technique was used; thus, obtaining 908 ninth grade students (391 boys and 517 girls) in six public high schools from different regions in Thailand.

### **II. Instrument**

The instrument consists of five tasks, that is, (1) listening ability, (2) word analogy, (3) grammar, (4) reading comprehension, and (5) new word invention. This instrument was designed for the students to finish it within 50 minutes.

For the listening ability task, the students are asked to listen to 20 sentences (10 in Thai and another 10 in English) and circle the correct word that corresponds to what they hear. For example, the students hear, from the tape recorder, "I want to go to Austria." The students select the correct word in the given sentence "I want to go to *Austria/Australia*". Thus, this task aims to measure if they are able to differentiate the minimal pairs in contexts.

The word analogy part comprises 10 items. The students analyze each given pair of words. They analyze the relationship between the two words. Then, from four multiple choices they choose the correct pair of words.

For the grammar task, the students see different sets of the data from a variety of languages such as English, Greek, and Arabic. The students analyze these data and summarize the grammar rules by answering short answers in the space provided.

For the reading comprehension task, the students read on passage containing 250 words. The students answer the seven questions and select the correct

answer from four multiple choices. The questions ask the students to find main idea, related details, words in context, referent terms, and tone of the speaker.

For the new word invention task, the word, ESTABLISHMENT, is given. The students are asked to invent new words as many as possible from the letters in the word “ESTABLISMENT.”

### III. Data collection

The data were collected at the end of the semester from February to March 2006. The samples, 908 ninth grade students, had already finished the lower secondary education.

### IV. Data analysis.

To understand the relationship between the students’ language ability and their educational backgrounds, Pearson Product Moment was used to analyze the data.

## RESULTS AND DISCUSSION

The following table illustrates the correlation coefficients between the students’ language ability and the educational backgrounds.

Table 1. Correlation coefficients between the language ability and educational backgrounds.

	Listening ability	Word analogy	Grammar	Reading comprehension	New word invention	
Gender	-.278	.208		.153	.084	.363**
Years	.187		.104	.317*	.245*	.685*
GPA	.212		.365	.441**	.321*	.466*

Note: \* is a significant level at .05  
 \*\* is a significant level at .01

Based on the information in Table 1, three major findings are elaborated.

#### 1. Gender is related to the ability to complete the new word invention task

Generally speaking, we seem to believe that girls do better than boys in terms of language study, but it is inconclusive in light of numerous research studies (see more in Ellis, 1994, 202-204). This study shows that the correlation coefficient between gender and the number of invented words in the new word invention task is 0.363, and it is significant at 0.05. It means that boys outperformed girls. Based on the given word “ESTABLISMENT,” boys can create more new words. The boys write more content words (e.g., mint, blame, blast) rather than function words (e.g., is, at, in). Their words are longer (e.g., estate, statement, establish).

Also, they write abbreviations (e.g., HTML). It seems that the boys enjoy playing with words and understand the concept of “word.” And at this point, boys seem more creative. Ellis (1994) supports that although female learners are better at vocabulary learning, male learners do better when they have to perform what they know.

2. Years of English study is connected to the ability to do the grammar, reading comprehension, and new word invention tasks.

Years of English study of the samples are different. Some started early at kindergarten, while other started at primary education (that is, grade 1). This is because they went to private schools first and then continued their lower secondary in the public high schools. The rest started at grade 5. Thus, years of English study ranged from 5 years to 12 years. In sum, those who have been exposed to English longer mean that they started earlier.

The correlation coefficient between years of English study and the scores in the grammar task is 0.317, and it is significant at 0.05. In addition, the coefficients between years of English study and the scores reading comprehension task and the number of invented new word invention task is 0.245 and 0.685, and they are significant at 0.05 and 0.01, respectively.

So far, there is no doubt about the early start. The research that was done for about 30 years ago by Krashen, Long, and Scarcella (1979) states that early language learner show better results than older ones in the long run. This statement still holds true. Recent research study by Dominguez and Pessoa (2005) confirm that learners who start early outperform new learners. Other scholars such as Scovel (1988), De Bot, Lowie, and Verspoor (2005), and Uylings (2006) also believe in the notion of “the sooner, the better.” That is, the students will obtain native-like grammar and pronunciation.

However, this study shows that years of English study is not connected with the listening ability and word analogy tasks. It is likely that the students have less experience in listening. They may spend less time in practicing listening. Also, in the word analogy task, the students must employ analytical skills to analyze the relationship between the pairs of words. That is to say, the students need both analytical skills and the knowledge of vocabulary to complete this task. Or, the students may not get used to this particular task. These points altogether deserve further investigation.

3. Grade point average (GPA) is connected to the ability to do the grammar, reading comprehension, and new word invention tasks.

Grade point average is calculated from the average scores from the grades of all subjects taken during the lower secondary education (3 years). The GPA gives the whole picture of the ability to learn in any subject.

The correlation coefficients between GPA and the scores of the grammar tasks, and the scores of the reading comprehension tasks, and the numbers of new words are 0.441, 0.321, and 0.466 with the significant level at 0.01, 0.05, and 0.05, respectively.

These correlation coefficients show empirical connection between GPA and the ability to do some language tasks. In other words, high achieving students as indicated by GPA perform well in the grammar, reading comprehension, and new word invention tasks. Although Carroll (1981, p 97) indicates that students “differ widely in their capacity to learn foreign language easily,” GPA proves useful to identify those who are capable of language study.

## SUMMARY AND RECOMMENDATIONS

This paper examined the relationship between the students’ language ability and their educational backgrounds. It helps Thai educators to better understand the nature of the students’ language ability and their education backgrounds, especially of the Thai EFL students in lower secondary education.

If we want to select potential lower secondary students to study in English gifted programs, what criteria can be used based on this study? Apart from other measures (such as, for example, teacher nomination and parent nomination), at least three language tasks prove useful and effective. These are the grammar task, the reading comprehension task, and the new word invention task. These tasks help to identify good achieving students who have high scores at  $X+2SD$  or at the 97<sup>th</sup> percentile rank.

It is important to note that gender seems likely to play a role, but only in the new word invention task. Therefore, it is too soon to conclude that one gender is better than the other in studying in a gifted program. This point needs close investigation. However, years of English study and GPA may be used in conjunction with other measures.

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